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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,457	03/26/2004	Johann Arnold	Q79724	7652

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER	
PATEL, CHANDRAHAS B	
ART UNIT	**PAPER NUMBER**
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/809,457	ARNOLD ET AL.	
	Examiner	Art Unit	
	Chandrahas Patel	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 November 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/26/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilhelmsson (USPN 5,654,969).

Regarding claim 1, Wilhelmsson teaches a method for transmitting real-time data packets in a cyclic communication system, wherein each of a plurality of transmission cycles has a first partial cycle for transmitting real-time communication and a second partial cycle for transmitting non-real-time communication **[Fig. 9, C-INFO is real time data, P-INFO is non-real time data]**, the method comprising: planning the real-time communication **[Col. 10, lines 25-26]**; determining a cycle number of a particular transmission cycle **[Col. 9, lines 60-61]**; and processing a transmission sequence of real-time data packets within the first partial cycle of the particular transmission cycle, wherein the transmission sequence is composed of one or more partial sequences, the composition of which depends on the cycle number determined for the particular transmission cycle **[Col. 9, lines 25-28, video is real time data and Fig. 9 C-INFO contains video data which is the first partial cycle, Col. 9, lines 60-63 teach determining the transmission cycle]**.

Regarding claim 2, Wilhelmsson teaches each of one or more real-time critical data packets are planned in advance **[Col. 10, lines 18-22]**.

Regarding claims 3, 7, 11, Wilhelmsson teaches the transmission sequence is a receive sequence or a send sequence of a user **[Col. 10, lines 24-27]**.

Regarding claims 4, 8, 12, Wilhelmsson teaches a length of the first partial cycle is selected as a function of the transmission sequence **[Col. 10, lines 17-20, octet(s) is the length]**.

Regarding claims 5, 9, 13, Wilhelmsson teaches transmission sequence is generated from a dynamic transmission list comprising one or more partial sequences and one or more conditional control commands **[Col. 10, lines 17-24]**, wherein a corresponding condition for each of the conditional control commands is based on the cycle number of the particular transmission cycle **[Col. 10, lines 24-32, SD specifies the particular transmission cycle]**.

Regarding claim 6, Wilhelmsson teaches a user of a cyclic communication system that is operable to transmit one or more transmission cycles each of which has a first partial cycle for real-time communication and a second partial cycle for non-real-time communication, wherein the real-time communication is planned in advance **[Fig. 9, C-INFO is real time data, P-INFO is non-real time data]**, the user comprising: means for determining a cycle number of a particular one of the transmission cycles **[Col. 9, lines 60-61]**; and means for processing a transmission sequence within a first partial cycle of the particular transmission cycle, wherein the transmission sequence is composed of one or more partial sequences the composition of which depends on the cycle number of the particular transmission cycle **[Col. 9, lines 25-28, Fig. 9 C-INFO contains video data which is the first partial cycle, Col. 9, lines 60-63 teach depending on the transmission cycle]**.

Regarding claim 10, Wilhelmsson teaches a cyclic communication system with at least a first and a second user, wherein each of one or more transmission cycles has a first partial cycle

for real-time communication and a second partial cycle for non-real-time communication, wherein the real-time communication is planned in advance **[Fig. 9, C-INFO is real time data, P-INFO is non-real time data]**, and the first and the second users comprise means for determining a cycle number of a particular one of the transmission cycles **[Col. 9, lines 60-61]**; and means for processing a transmission sequence in the first partial cycle of the particular transmission cycle, wherein the transmission sequence is composed of one or more partial sequences the composition of which depends on the cycle number of the particular transmission cycle number **[Col. 9, lines 25-28, Fig. 9 C-INFO contains video data which is the first partial cycle, Col. 9, lines 60-63 teach depending on the transmission cycle]**.

Regarding claim 14, Wilhelmsson teaches a communication system operable to isochronously transmit data between respective users during transmission cycles **[Abstract]**, the system comprising: a network operable to connect the users **[Fig. 1, IVDLAN]**; an application program corresponding to a first user **[Col. 6, lines 65-66]**; a memory portion corresponding to the first user and operable to store user data to facilitate control of the first user, and output data to be transmitted over the network to a second user **[Fig. 3, 37]**; a cycle counter corresponding to the first user and operable to count the transmission cycles corresponding to a communication between the first user and the second user **[Col. 6, lines 11-22]**; and a processing portion corresponding to the first user and operable to determine a number of a subsequent transmission cycle **[Fig. 6, 61]**, wherein the output data is transmitted from the first user to the second user during the subsequent transmission cycle which is divided into a real-time partial cycle and a non-real-time partial cycle in a manner that depends on the cycle number determined by the

processing portion **[Col. 9, lines 25-28, Fig. 9 C-INFO contains video data which is the first partial cycle, Col. 9, lines 60-63 teach depending on the transmission cycle]**.

Regarding claim 15, Wilhelmsson teaches the real-time partial cycle comprises one or more microcycles and a transmission sequence of the one or more microcycles is dynamically programmed based on the cycle number determined by the processing portion **[Fig. 9, C-INFO which is real-time cycle is divided into microcycles as shown in second-fifth frame, Start Delimiter indicate the cycle number]**.

Regarding claim 16, Wilhelmsson teaches the transmission sequence if predefined prior to commencement of the communication between the first and second users **[Col. 10, lines 16-24]**.

Regarding claim 17, Wilhelmsson teaches the network comprises a network based on **at least one of** FieldBus, Profibus, **Ethernet**, Industrial Ethernet, FireWire, PC-internal bus systems (PCIs) and Isochronous Realtime Ethernet **[Col. 2, lines 26-29]**.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrahas Patel whose telephone number is 571-270-1211. The examiner can normally be reached on Monday through Thursday 7:30 to 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CBP

RICKY Q. NGO
SUPERVISORY PATENT EXAMINER